

### **AMENDMENTS TO THE CLAIMS**

1. (Previously presented) A fuel additive comprising: beta-carotene; and 2,2,4-trimethyl-6-ethoxy-1,2-dihydroquinoline,  
  
wherein a ratio of grams of beta-carotene to grams of 2,2,4-trimethyl-6-ethoxy-1,2-dihydroquinoline in the additive is from about 20:1 to about 1:1.
2. (Previously presented) A fuel additive comprising:  
  
a first compound selected from the group consisting of carotenes, carotenoids, carotene derivatives, carotene precursors, carotenoid derivatives, carotenoid precursors, and mixtures thereof; and  
  
a stabilizing compound that inhibits oxidation of the first compound,  
  
wherein a ratio of grams of a first compound to grams of a stabilizing compound in the additive is from about 20:1 to about 1:1.
3. (Previously Presented) The fuel additive of claim 2, wherein the stabilizing compound comprises 2,2,4-trimethyl-6-ethoxy-1,2-dihydroquinoline.
4. (Previously Presented) The fuel additive of claim 2, further comprising a plant oil extract and a thermal stabilizer.
5. (Previously Presented) The fuel additive of claim 4, wherein the plant oil extract is selected from the group consisting of an oil extract of a plant of the *Leguminosae* family, an oil extract of barley, chlorophyll, and combinations thereof.

6. (Canceled)
7. (Canceled)
8. (Previously presented) The fuel additive of claim 4, wherein the thermal stabilizer is selected from the group consisting of jojoba oil, meadowfoam oil, an ester of a C20-C22 straight chain monounsaturated carboxylic acid, and combinations thereof.
9. (Canceled)
10. (Previously Presented) The fuel additive of claim 4, wherein the plant oil extract comprises oil extract of barley and the thermal stabilizer comprises jojoba oil.
11. (Canceled)
12. (Previously Presented) The fuel additive of claim 2, further comprising a diluent selected from the group consisting of toluene, gasoline, diesel fuel, jet fuel, and mixtures thereof.
13. (Canceled)
14. (Previously Presented) The fuel additive of claim 2, further comprising an oxygenate selected from the group consisting of methanol, ethanol, methyl tertiary butyl ether, ethyl tertiary butyl ether, tertiary amyl methyl ether, and mixtures thereof.
15. (Canceled)
16. (Canceled)
17. (Previously Presented) The fuel additive of claim 1, wherein a ratio of grams of beta-carotene to grams of

2,2,4-trimethyl-6-ethoxy-1,2-dihydroquinoline in the additive is from about 15:1 to about 5:1.

18. (Previously Presented) The fuel additive of claim 1, wherein a ratio of grams of beta-carotene to grams of 2,2,4-trimethyl-6-ethoxy-1,2-dihydroquinoline in the additive is about 10:1.
19. (Previously Presented) The fuel additive of claim 2, further comprising 2-ethylhexyl nitrate.
20. (Previously presented) An additized fuel comprising a base fuel and a fuel additive comprising:  
  
beta-carotene; and  
  
2,2,4-trimethyl-6-ethoxy-1,2-dihydroquinoline,  
  
wherein a ratio of grams of beta-carotene to grams of 2,2,4-trimethyl-6-ethoxy-1,2-dihydroquinoline in the additive is from about 20:1 to about 1:1.
21. (Previously presented) An additized fuel comprising a base fuel and a fuel additive comprising:  
  
a first additive selected from the group consisting of carotenes, carotenoids, carotene derivatives, carotene precursors, carotenoid derivatives, carotenoid precursors, and mixtures thereof; and  
  
a stabilizing compound that inhibits oxidation of the first additive,  
  
wherein a ratio of a first additive to grams of a stabilizing compound in the additive is from about 20:1 to about 1:1.

22. (Previously Presented) The additized fuel of claim 20, wherein the fuel comprises from about 0.00025 g to about 0.05 g beta-carotene per 3785 ml additized fuel and from about 0.000025 g to about 0.005 g 2,2,4-trimethyl-6-ethoxy-1,2-dihydroquinoline per 3785 ml additized fuel.
23. (Previously Presented) The additized fuel of claim 20, wherein the fuel comprises from about 0.00053 g to about 0.021 g beta-carotene per 3785 ml additized fuel and from about 0.000053 g to about 0.0021 g 2,2,4-trimethyl-6-ethoxy-1,2-dihydroquinoline per 3785 ml additized fuel.
24. (Canceled)
25. (Canceled)
26. (Canceled)
27. (Canceled)
28. (Canceled)
29. (Canceled)
30. (Canceled)
31. (Previously presented) The fuel additive of claim 1 further comprising 2-ethylhexyl nitrate and toluene.
32. (Previously Presented) The fuel additive of claim 31, wherein the beta-carotene comprises a mixture of cis and trans isomers of beta-carotene.
33. (Previously presented) The additized fuel of claim 20 wherein the additive further comprises 2-ethylhexyl nitrate and toluene.

34. (Previously presented) A fuel additive comprising: beta-carotene; and 2,2,4-trimethyl-6-ethoxy-1,2-dihydroquinoline,

wherein a ratio of grams of beta-carotene to grams of 2,2,4-trimethyl-6-ethoxy-1,2-dihydroquinoline in the additive is from about 20:1 to about 1:1, and

wherein the beta-carotene is a mixture of cis-beta-carotene, and trans- beta-carotene.